

Application No.: 09/722923

Docket No.: SMQ-114RCE/P5635

**BEST AVAILABLE COPY****AMENDMENTS TO THE CLAIMS**

Please amend the presently pending claims as follows:

1. (Currently Amended) A method for maintaining a database of objects accessible by applications written in a plurality of programming languages comprising:

~~requesting to store~~receiving an instance of an first object to store in a database, wherein the first object is implemented in a first programming language into a database;

~~receiving an instance of a second object to store in the database, wherein the second object is implemented in a second programming language;~~

~~providing~~generating at least one a first structured document representing the instance of the first object including attributes and attribute values defined for a class;

~~generating at least a second structured document representing the instance of the second object;~~

~~adding content of the first structured document representing the first object into the database, the database storing a plurality of structured documents representing a plurality of objects originally instantiated in at least two different programming languages; and~~

~~adding content of the second structured document representing the second object into the database and~~

~~sharing the at least one structured documents representing the instance of the object implemented in a first programming language with an application written in a second programming language.~~

2. (Currently Amended) The method of claim 1, further comprising:

~~receiving multiple structured documents representing instances of objects defined for the a class, wherein the objects represented in at least two different received structured documents were generated in different programming languages.~~

3. (Original)The method of claim 2, wherein application programs implemented in different programming languages can share objects represented as structured documents in the database.

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4. (Original) The method of claim 1, wherein the database comprises a structured document, and wherein adding the content of each structured document representing one object comprises inserting the content of the structured document representing the object into the structured document implementing the database.

5. (Original) The method of claim 4, wherein the database structured document and the structured documents representing the objects are in a same file format.

6. (Original) The method of claim 5, wherein the same file format comprises an extensible markup language (XML) document format.

7. (Currently Amended) The method of claim 1, wherein each of the first and second structured documents comprises an extensible markup language (XML) document.

8. (Currently Amended) The method of claim 1, wherein all the first and second objects represented as structured document content in the database are instantiated from a same class.

9. (Currently Amended) A method for accessing a database of objects originally instantiated in at least two different programming languages, comprising:

generating an instance of ~~at least one~~ a first object including attributes and attribute values defined for a class, ~~the object originally instantiated in a first programming language;~~

generating an instance of a second object including attributes and attribute values defined for the class in a second programming language;

generating a first structured document representing the ~~at least one~~ first object and ~~including a representation of the attributes and attribute values in the object~~ a second structured document representing the second object;

transferring each structured document to the database to maintain, ~~the database storing at least one other structured document representing an object originally instantiated in a second programming language.~~

10. (Currently Amended) The method of claim 9, further comprising:

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receiving the first structured document from the database representing attributes and attribute values for the ~~at least one~~ first object originally instantiated in a first programming language; and

generating ~~an~~ third object in ~~a the first, second, or a third~~ programming language that includes the attributes and attribute values represented in the first structured document, wherein the generated object embodies the first object represented by the received first structured document.

11. (Canceled)

12. (Currently Amended) The method of claim 11~~2~~, wherein application programs implemented in the first and second programming languages are capable of sharing objects represented as structured documents in the database.

13. (Currently Amended) The method of claim 9, wherein the database comprises a structured document, and wherein ~~adding the content of the structured documents representing the objects~~ further comprising inserting the content of the first and second structured documents into the database structured document.

14. (Currently Amended) The method of claim 13, wherein the database structured document and the first and second structured documents ~~representing the objects~~ are in a same file format.

15. (Original) The method of claim 14, wherein the same file format comprises an extensible markup language (XML) document format.

16. (Currently Amended) The method of claim 9, wherein each of the first and second structured documents ~~s~~ comprises an extensible markup language (XML) document.

17. (Currently Amended) The method of claim 9, wherein ~~all the~~ the first and second objects ~~represented as structured document content in the database~~ are instantiated from a same class.

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18. (Currently Amended) A system for maintaining a database of objects, comprising:  
means for receiving an instance of a first object and an instance of a second object to store in a database, wherein the first object is implemented in a first programming language and the second object is implemented in a second programming language;

means for receiving at least one generating a first structured document and a second structured document representing an the instance of an the first object and the instance of the second object, respectively including attributes and attribute values defined for a class, the object originally instantiated in a first programming language; and

means for adding content of the first and second structured documents respectively representing the first and second objects into the database, wherein the database stores a plurality of structured documents representing multiple objects originally instantiated in at least two programming languages.

19. (Currently Amended) The system of claim 18, further comprising:

means for receiving multiple structured documents representing instances of objects defined for the a class, wherein the objects represented in at least two different received structured documents were generated in different programming languages.

20. (Original) The system of claim 19, wherein application programs implemented in different programming languages can share objects represented as structured documents in the database.

21. (Original) The system of claim 18, wherein the database comprises a structured document, and wherein adding the content of each structured document representing one object comprises inserting the content of the structured document representing the object into the structured document implementing the database.

22. (Currently Amended) The system of claim 21, wherein the database structured document and the first and second structured documents representing the objects are in a same file format.

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23. (Original) The system of claim 22, wherein the same file format comprises an extensible markup language (XML) document format.

24. (Currently Amended) The system of claim 18, wherein each of the first and second structured documents comprises an extensible markup language (XML) document.

25. (Currently Amended) The system of claim 18, wherein ~~all the~~ first and second objects represented as structured document content in the database are instantiated from a same class.

26. (Currently Amended) A system for accessing a database of objects by a plurality of applications, comprising:

means for generating an instance of ~~at least one a~~ first object and a second object, the first object including attributes and attribute values defined for a class, ~~the at least one object originally instantiated in a first programming language and the second object including attributes and attribute values defined for the class in a second programming language;~~

means for generating a first and second structured document representing the ~~at least one first and second objects respectively and including a representation of the attributes and attribute values in the object;~~ and

means for transferring each structured document to the database to maintain, ~~the database including a plurality of structured documents representing objects originally instantiated in at least the first and a second language.~~

27. (Currently Amended) The system of claim 26, further comprising:

means for receiving the first structured document from the database representing attributes and attribute values for ~~at least one~~ the first object; and

means for generating an third object including the attributes and attribute values represented in the first structured document, wherein the generated object embodies the first object represented by the received first structured document, and the generated object is implemented in the first, ~~or second,~~ or third programming language.

28. (Canceled)

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29. (Currently Amended) The system of claim ~~28~~26, wherein application programs implemented in the first and second programming languages are capable of sharing objects represented as structured documents in the database.

30. (Currently Amended) The system of claim 26, wherein the database comprises a structured document, and ~~wherein adding the content of the structured documents representing the objects comprises~~ further comprising means for inserting the content of the first and second structured documents into the database structured document.

31. (Currently Amended) The system of claim 30, wherein the database structured document and the first and second structured documents representing the objects are in a same file format.

32. (Original) The system of claim 31, wherein the same file format comprises an extensible markup language (XML) document format.

33. (Original) The system of claim 26, wherein the structured document comprises an extensible markup language (XML) document.

34. (Currently Amended) The system of claim 26, wherein ~~all the~~ the first and second objects ~~represented as structured document content in the database~~ are instantiated from a same class.

35. (Currently Amended) An article of manufacture for maintaining a database of objects wherein the article of manufacture comprises code implemented in a computer readable medium capable of causing a processor to perform:

receiving an instance of a first object and an instance a second object to store in a database, wherein the first object is implemented in a first programming language and the second object is implemented in a second programming language;

receiving-generating at least one a first and second structured documents, wherein the first structured document representing the instance of an the first object including attributes and

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~~attribute values defined for a class and the second structured representing the instance of the second object, the object originally instantiated in a first programming language; and~~  
adding content of the first and second structured document respectively representing the first and second object into the database, ~~wherein the database stores multiple structured documents representing multiple objects, the documents stored in the database representing objects originally instantiated in at least the first programming language and a second programming language.~~

36. (Currently Amended) The article of manufacture of claim 35, wherein the code is further capable of causing the processor to perform:

receiving multiple structured documents representing instances of objects defined for ~~the~~ a class, wherein the objects represented in at least two different received structured documents were generated in different programming languages.

37. (Original) The article of manufacture of claim 36, wherein application programs implemented in different programming languages can share objects represented as structured documents in the database.

38. (Currently Amended) The article of manufacture of claim 35, wherein the database comprises a structured document, and wherein adding the content of ~~each the first and second structured documents representing one object~~ comprises inserting the content of the first and second structured document representing the object into the structured document implementing the database.

39. (Original) The article of manufacture of claim 38, wherein the database structured document and the structured documents representing the objects are in a same file format.

40. (Original) The article of manufacture of claim 39, wherein the same file format comprises an extensible markup language (XML) document format.

41. (Original) The article of manufacture of claim 35, wherein the structured document comprises an extensible markup language (XML) document.

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42. (Currently Amended) The article of manufacture of claim 35, wherein ~~all the~~ the first and second objects ~~represented as structured document content in the database~~ are instantiated from a same class.

43. (Currently Amended) An article of manufacture for accessing a database of objects by a plurality of applications, the plurality of applications written in at least two different programming languages, wherein the article of manufacture comprises code implemented in a computer readable medium capable of causing a processor to perform:

generating an instance of ~~at least one~~ a first object including attributes and attribute values defined for a class, ~~the at least one object originally instantiated in a first programming language;~~

generating an instance of a second object including attributes and attribute values defined for the class in a second programming language;

~~for each generated document, generating a~~ first structured document representing the ~~at least one~~ first object and ~~including a representation of the attributes and attribute values in the object~~ a second structured document representing the second object; and

transferring each structured document to the database to maintain, ~~the database including structured documents representing objects instantiated in at least first and a second programming language.~~

44. (Currently Amended) The article of manufacture of claim 43, wherein the code is further capable of causing the processor to perform:

receiving the first structured document from the database representing attributes and attribute values for the ~~least one~~ first object; and

generating an third object including the attributes and attribute values represented in the first structured document, wherein the generated object embodies the first object represented by the received first structured document, and the generated object is implemented in the first, second, or a third programming language.

45. (Canceled)



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46. (Currently Amended) The article of manufacture of claim 4543, wherein application programs implemented in the first and second programming languages are capable of sharing objects represented as structured documents in the database.

47. (Currently Amended) The article of manufacture of claim 43, wherein the database comprises a structured document, and wherein the code is further capable of causing the processor to perform wherein adding the content of the structured documents representing the objects comprises inserting the content of the first and second structured documents into the database structured document.

48. (Currently Amended) The article of manufacture of claim 47, wherein the database structured document and the first and second structured documents representing the objects are in a same file format.

49. (Original) The article of manufacture of claim 48, wherein the same file format comprises an extensible markup language (XML) document format.

50. (Currently Amended) The article of manufacture of claim 43, wherein each of the first and second the structured documents comprises an extensible markup language (XML) document.

51. (Currently Amended) The article of manufacture of claim 43, wherein all the the first and second objects represented as structured document content in the database are instantiated from a same class.

52. (Currently Amended) A computer readable medium including a computer database of objects, comprising:

at least one a first and second structured documents, wherein the first structured document representing an instance of an first object including attributes and attribute values defined for a class, the object originally instantiated in a first programming language and the second structured document representing an instance of a second object including attributes and attribute values defined for the class in a second programming language, wherein the database

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~~stores multiple structured documents representing multiple objects, the multiple objects originally instantiated in at least the first programming language and a second programming language; and~~

a database interface to receive a request to store the instance of the first and second objects to the database and to store content of the first and second structured documents ~~representing the instance of the object~~ into the database.

53. (Currently Amended) The computer readable medium of claim 52, wherein the database stores multiple structured documents representing instances of objects defined for ~~the a~~ class, and wherein the objects represented in at least two different structured documents stored in the database were generated in different programming languages.

54. (Original) The computer readable medium of claim 53, wherein application programs implemented in different programming languages can share objects represented as structured documents in the database.

55. (Currently Amended) The computer readable medium of claim 52, wherein the database comprises a structured document, and wherein the first and second structured documents respectively representing the first and second objects are added to the database by inserting the content of the first and second structured documents ~~representing the object~~ into the structured document implementing the database.

56. (Currently Amended) The computer readable medium of claim 55, wherein the database structured document and the first and second structured documents ~~representing the objects~~ are in a same file format.

57. (Original) The computer readable medium of claim 56, wherein the same file format comprises an extensible markup language (XML) document format.

58. (Original) The computer readable medium of claim 52, wherein the structured document comprises an extensible markup language (XML) document.

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59. (Currently Amended) The computer readable medium of claim 52, wherein ~~all the~~ first and second objects ~~represented as structured document content in the database~~ are instantiated from a same class.

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